

Integration Note

| Manufacturer: | Heatmiser Neo | | |
|------------------------------|-----------------|--|--|
| Model Number(s): | NeoHub, NeoStat | | |
| Minimum Core Module Version: | 7.2 | | |
| Document Revision Date: | 6/24/2015 | | |

OVERVIEW AND SUPPORTED FEATURES

This driver allows a **g!** system to communicate with a Heatmiser Neo heating system via Ethernet.

HEATMISER NEO HEATING SYSTEMS SUPPORT THE FOLLOWING FEATURES:

Any feature not specifically noted as "supported" is not supported.

Temperature Control: Temperature control can be managed by the viewer. Temperature can be shown as either Fahrenheit or Celsius on the viewer interface, and show one decimal place or whole numbers only.

Schedule Control: Multiple schedules can be set using the Viewer software. The schedules are tied to the house mode. All scheduling is handled by **g!** and any scheduling information residing in the thermostats will be disabled by the driver.

Mode Control: The g! system is set up to control Heatmiser modes: Heat and Frost Protect.

History View: The history view shows the inside temperature, outside temperature, unit run times, and the current set point.

HEATMISER NEO HEATING SYSTEMS DO NOT SUPPORT THE FOLLOWING FEATURES:

Device Discovery: Thermostats must be added manually in configurator.

CONNECTION DIAGRAM

Refer to the Bill of Materials and Wiring Diagram that follow.



BILL OF MATERIALS

| ŧ | Device | Manufacturer | Part Number | Protocol | Connector Type | Notes |
|---|------------------|--------------|---------------------|----------|-------------------------|---------------------------------|
| 1 | Thermostat | Heatmiser | NeoStat | Ethernet | Proprietry Wireless | |
| 2 | Cat5 Cable Assy. | Installer | NłA | Ethernet | RJ-45 Male X RJ-45 Male | Must terminate all 8 conductors |
| 3 | Network Assembly | ELAN | NWA18 | Ethernet | RJ-45 Female | |
| 4 | g! Controller | ELAN | Various (e.g. HC12) | Ethernet | RJ-45 Female | |
| 5 | Interface device | Heatmiser | NeoHub | Ethernet | RJ-45 Female | |

HEATMISER CONFIGURATION OVERVIEW

The Heatmiser Neo system must be installed and configured according to Heatmiser documentation (more information can be found at <u>http://www.heatmiser.com</u>). No specific additional set up is required for integration with this driver, however it is strongly recommended that the IP address of the NeoHub is fixed so that it cannot change unexpectedly and lose communication with the g! system. This can be achieved using a MAC address based reservation, as found on most routers.

NOTE: It is strongly recommended that, once integration between the Heatmiser system and **g!** is complete, users do not attempt to control the Heatmiser system using the Neo application. Whilst this would be in no way harmful, it would likely result in conflicting configurations.

g! CONFIGURATION

In the **Climate** tab in Configurator, choose to add a new communication device, selecting **Heatmiser neoHub** from the list. Enter the IP address of the Heatmiser NeoHub into the **IP Address** field. In the **Port** field, enter the port number to connect to (by default this is "4242"). Next, add a **Heatmiser neoHub** Thermostat for each NeoStat in the system. In the **Address** field for each Thermostat, enter the zone name as defined in the Heatmiser Neo application. At this point, you may also want to edit **Name** field for the thermostat in order to identify it meaningfully in the g! interface.

Scheduling

Scheduling can be set up in **g!** to control Heatmiser Neo thermostats in the normal way. All local scheduling capabilities on the thermostats themselves will be disabled by default. It is recommended that this is not overwritten by the user, as having two scheduling systems controlling the same thermostat will cause conflict.

The concept of "holiday mode" on the thermostats is also disabled, as holiday scheduling is handled by the **Away** schedule in **g!.** Some Heatmiser thermostats have a separate schedule to control hot water, which cannot currently be controlled by **g!**. A recommended workaround for this is to disable hot water scheduling in the thermostat and use a relay output on the **g!** controller to directly control the hot water as a relay device, rather than a climate device.

Whilst the NeoStats support the concept of timed temperature "holds", it is currently not possible to support this feature in **g!**. All holds should be initiated from the **g!** interface.

<u>g!</u> CONFIGURATION DETAILS

The following table provides settings used in the **g**! Configurator. Please refer to the Configurator Reference Guide for more details.

- "<Select from list>" Select the appropriate item from the list (or drop-down) in the Configurator.
- "<User Defined>", etc. Type in the desired name for the item.
- "<Auto Detect>", etc. The system will auto detect this variable.

Refer to the **g! System Programming Details** below for additional information.

| Devices | Variable Name | Settings | Notes |
|-----------------------|-------------------------------------|--|---|
| | | | |
| Communication Devices | Name | <pre><user defined=""> (Default: Heatmiser neoHub)</user></pre> | |
| | System # | <auto detect=""></auto> | |
| | Device Type | Ethernet | |
| | Driver Name | Heatmiser neoHub | |
| | Driver Version | <auto detect=""></auto> | |
| | Driver Vendor | <auto detect=""></auto> | |
| | IP Address | <user defined=""></user> | Enter the IP address of the NeoHub |
| | Port | <user defined=""> (Default: 4242)</user> | Enter the port number used to connect to the NeoHub |
| | | | |
| | | | |
| Thermostats | Name | <user defined=""> (Default: Heatmiser neoStat Thermostat)</user> | |
| | System # | <auto detect=""></auto> | |
| | Driver Version | <auto detect=""></auto> | |
| | Driver Vendor | <auto detect=""></auto> | |
| | Device Type | Heatmiser neoStat Thermostat | |
| | Communication Device | <select from="" list=""></select> | Choose the "Heatmiser neoHub" communication device |
| | Address | <user defined=""></user> | Enter the zone name as defined in the Heatmiser Neo application |
| | Heating Unit | <select from="" list=""></select> | |
| | Cooling Unit | <select from="" list=""></select> | |
| | Show Usage in History | <select from="" list=""></select> | |
| | | | |
| | | | |
| Schedule Layout | Number of Schedules | <select from="" list=""></select> | |
| | Select House Modes for Schedules | <select from="" list=""></select> | |
| | Periods per Day | <select from="" list=""></select> | |
| | Number of Weekly Programs | <select from="" list=""></select> | |
| | Select Days for each Weekly Program | <select from="" list=""></select> | |
| | | | |
| | | | |
| Global Options | Units | <select from="" list=""></select> | |
| | Temporary Hold Mode | <select from="" list=""></select> | |
| | Temporary Hold Default Time | <select from="" list=""></select> | |
| | Outside Temperature Sensor | <select from="" list=""></select> | |
| | Outside Humidity Sensor | <select from="" list=""></select> | |
| | | | |
| | | | |

COMMON MISTAKES

- Not entering the zone name correctly in the Address field of the thermostat.
- Not entering the correct IP address for the NeoHub in the communication device properties.
- Attempting to use the native scheduling of the Neo system, creating a conflict with the scheduling built-in to **g**!
- Attempting to use the native "hold" functionality of the Neo system, creating a conflict with the holds initiated in by **g!**